



# Berwyn Heights Tree Plan 2016

*Actionable Tree Intelligence*



# Components

- Tree inventory
- Tree canopy assessment
- Urban Forest Management Plan

# Berwyn Heights Tree Inventory

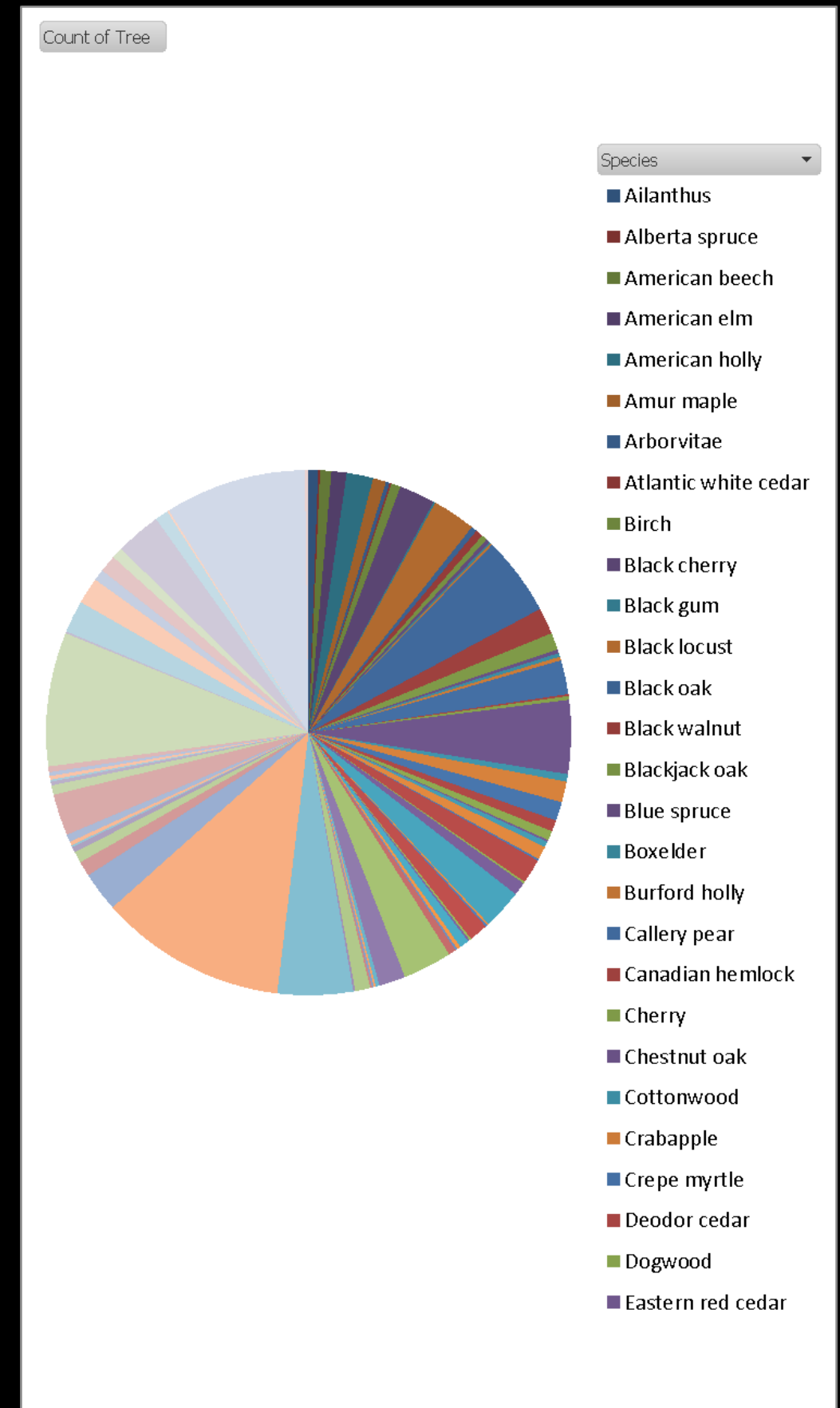
Results

# Data variables

Tree # - Size – Species – Stems under 1 foot -  
Condition – Primary maintenance -  
Failure – Impact – Failure and Impact – Consequences –  
Risk -  
Observations – Further inspection -  
Hardscape damage 1 inch or more -  
Utilities – Growing space -  
Other notes - Location

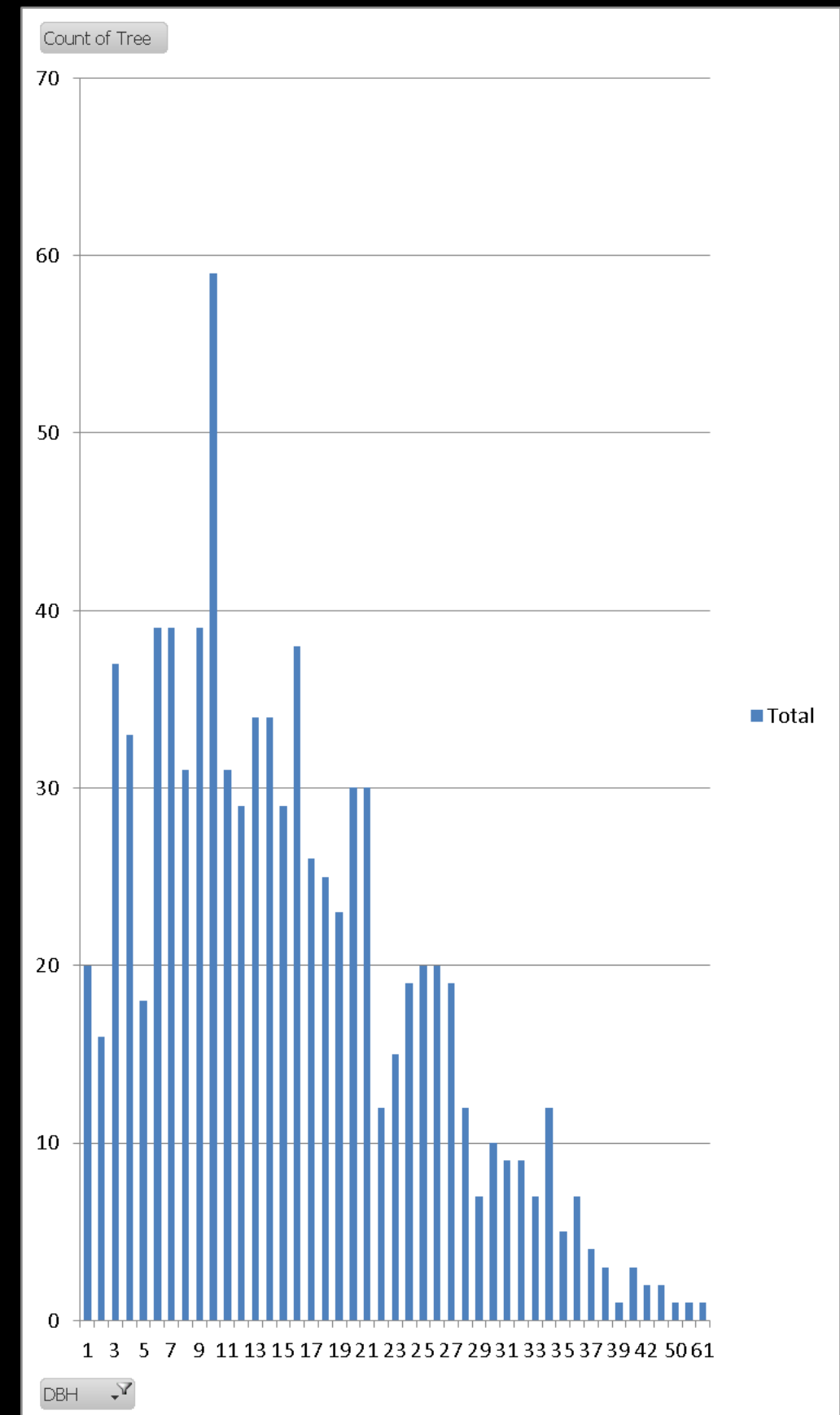
# Sustainability - Diversity

- Population is extremely diverse
- Diversity = resilience
- Most common tree, red maple, makes up 11% of population



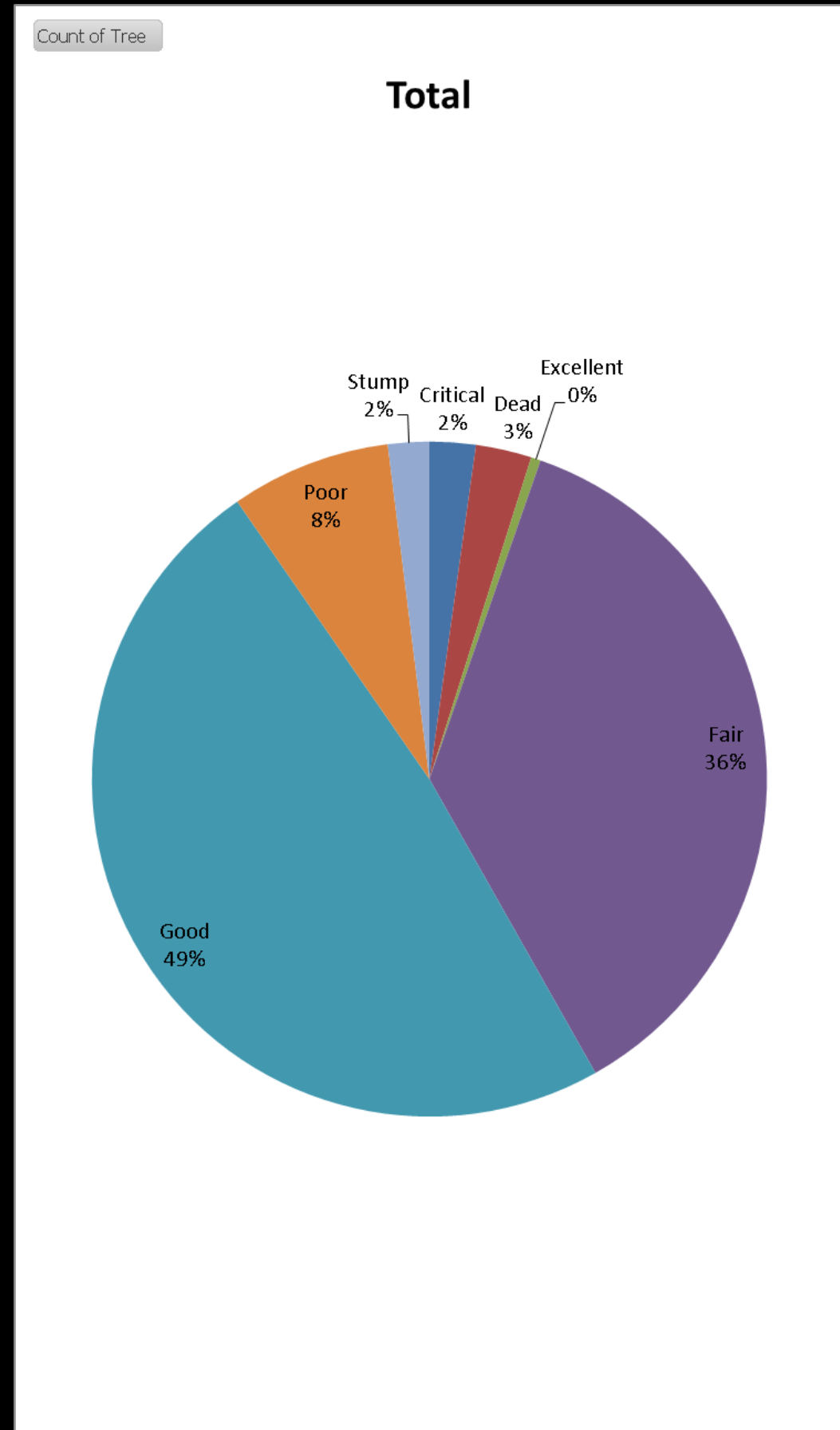
# Sustainability- age

- Size used as proxy for age
  - Ideal = “Reverse J”, with many younger trees and fewer older ones
- This population follows that well



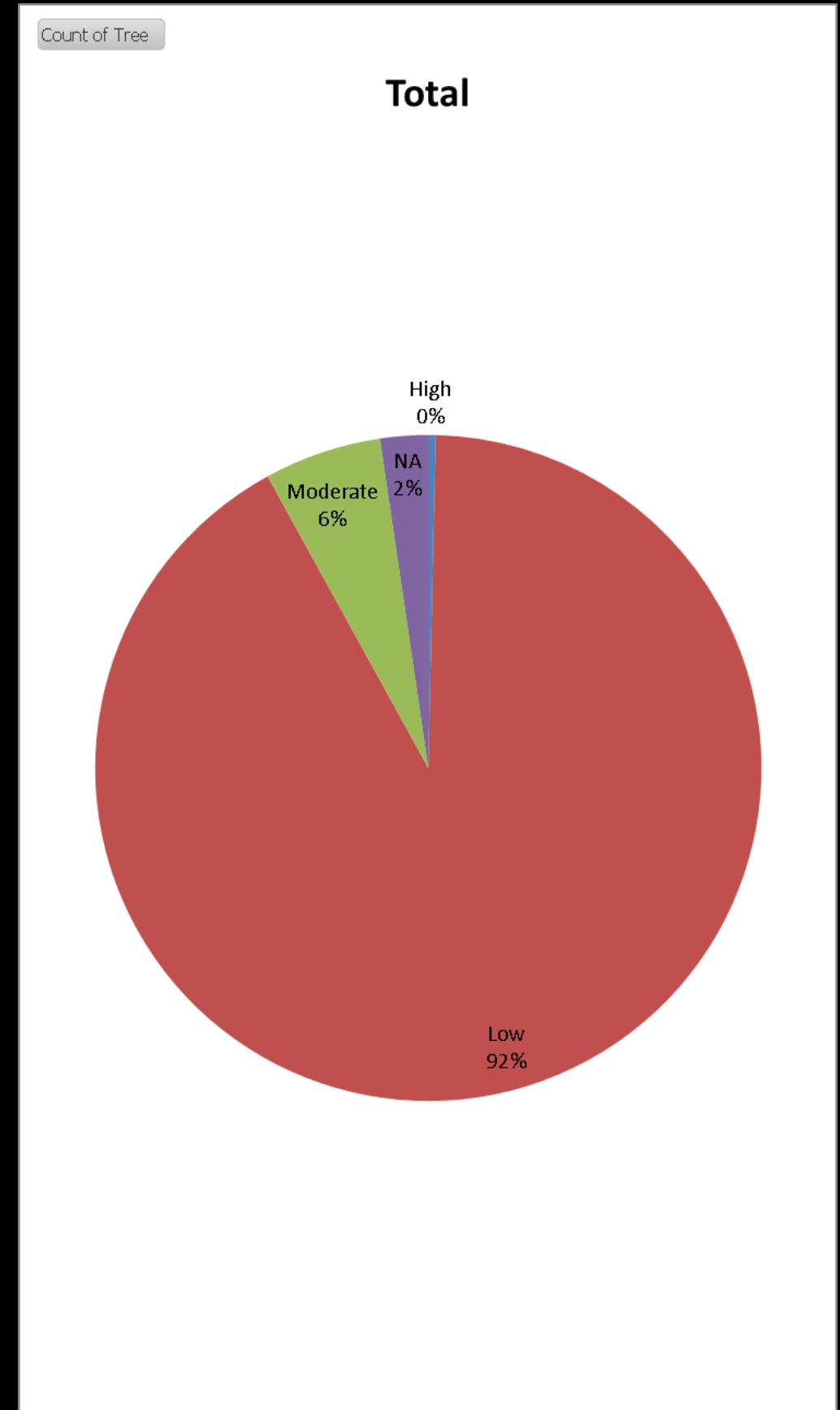
# Condition

- 85% in Fair or better condition
- 5% Dead or Critical



# Risk

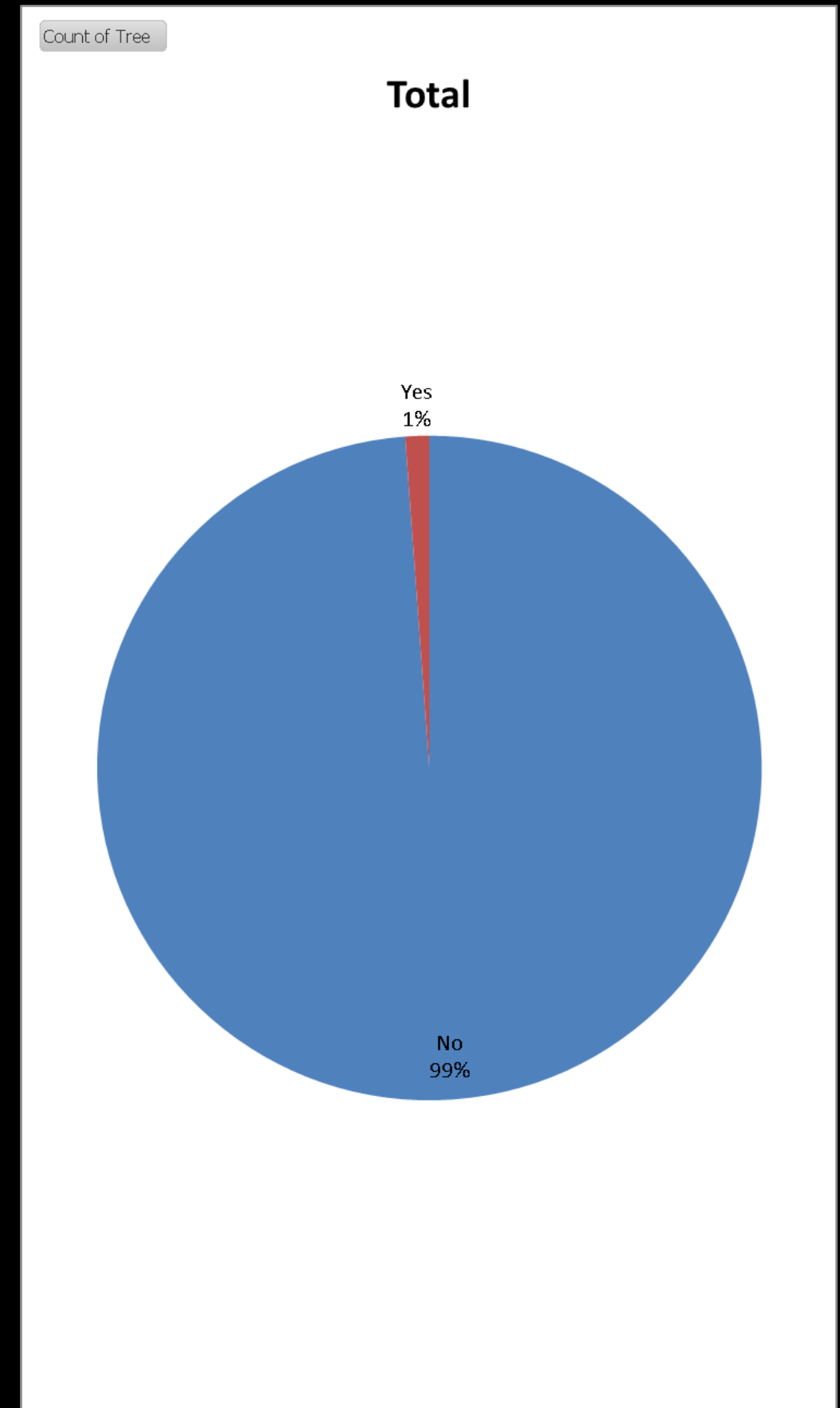
- High risk: 0% / 3 trees





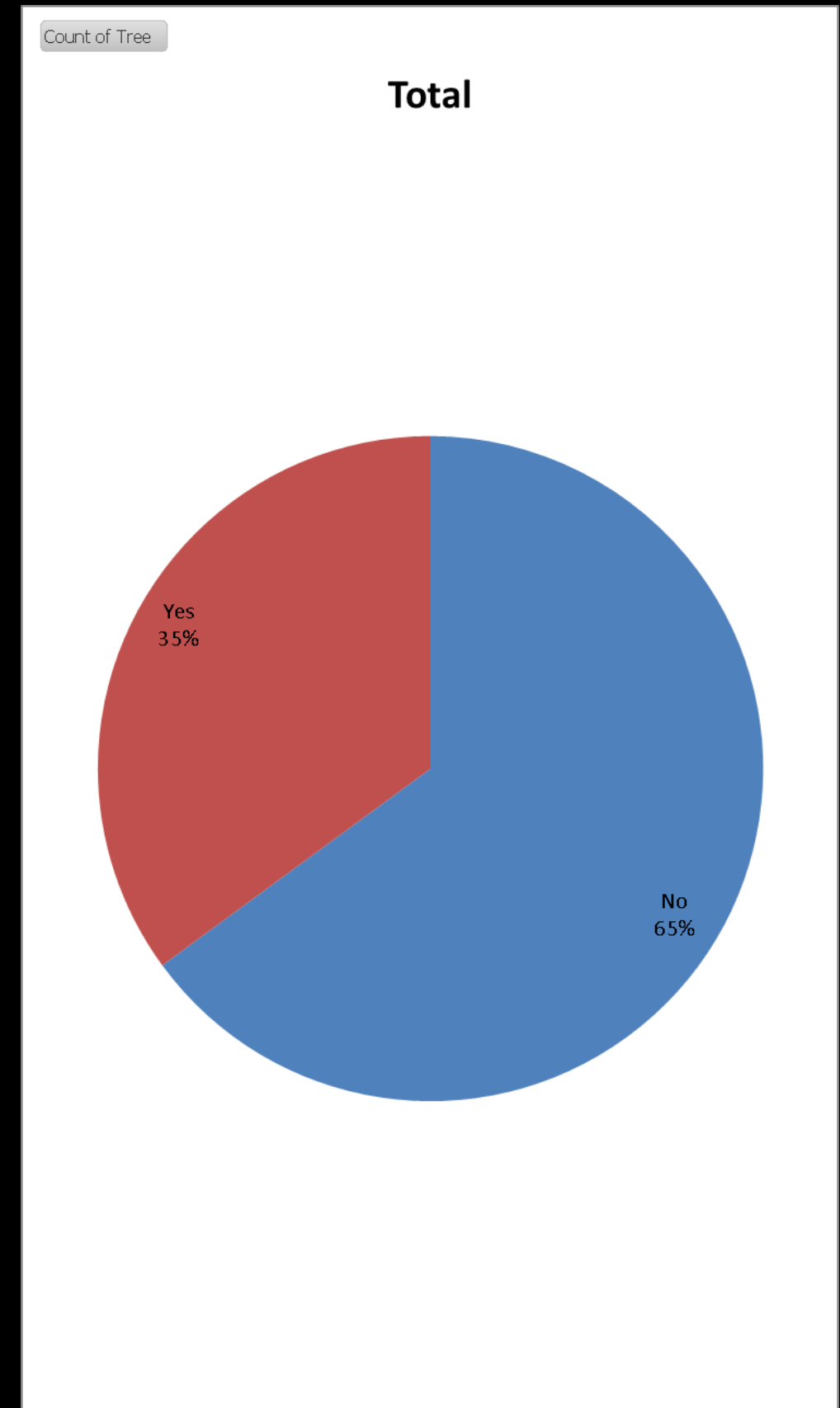
# Hardscape damage

- Very low occurrence
  - 1% / 10 trees



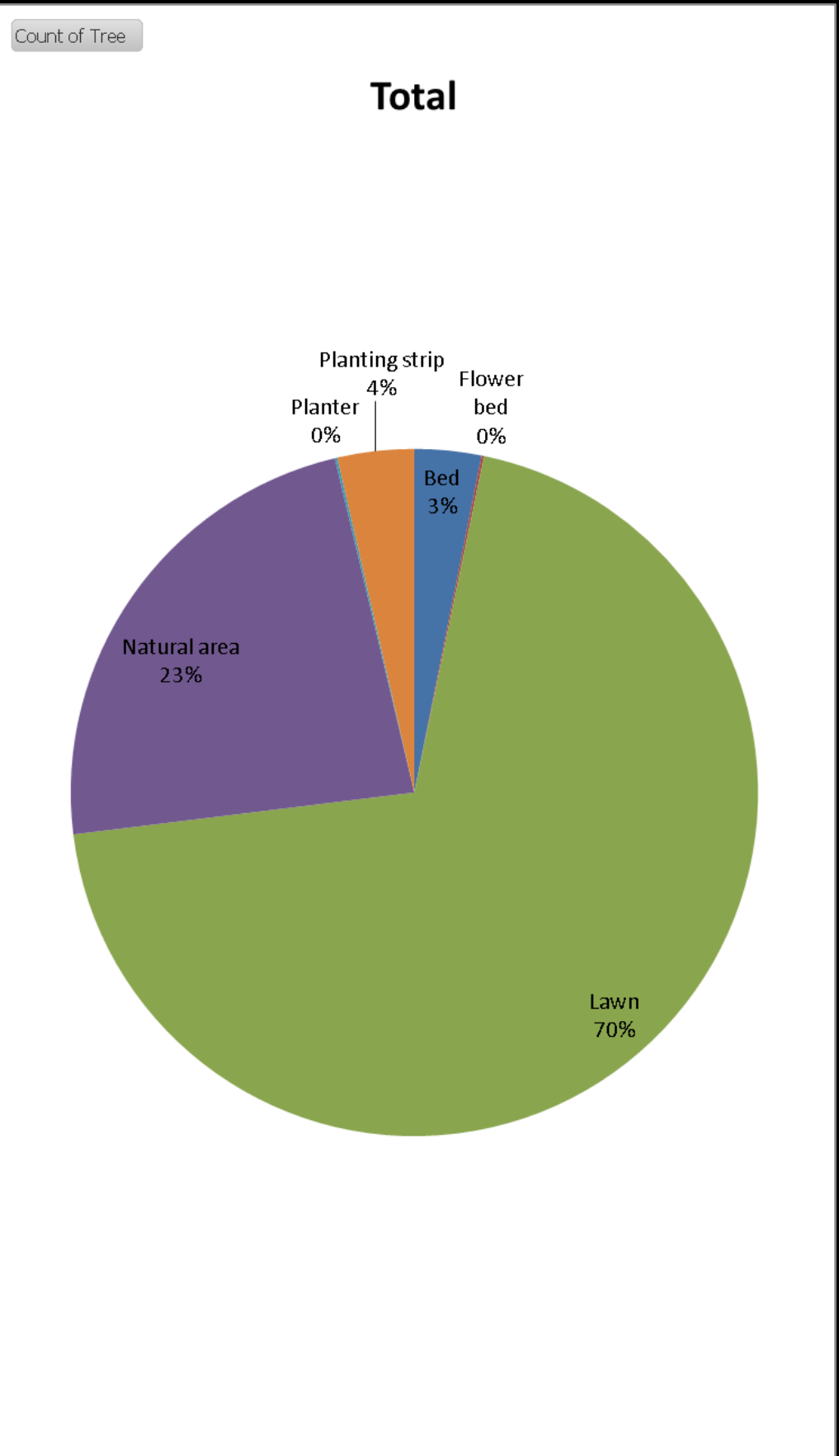
# Overhead utilities

- The majority of public trees are not growing beneath overhead utility lines



# Growing space

- Most in lawns and natural areas
- Reflects “tenants-in-common” status of most trees



# Summary - trees

- 861 trees inventoried (street and public property)
- Population is resilient (age & diversity)
- Though the maintenance program is not extensive, most trees are in average condition and very few pose significant risk.
- However, 24% need crown cleaning and 14% are recommended for removal
- Overall = good!

# Summary - infrastructure

- Public trees in Berwyn Heights cause almost no hardscape damage
- Most trees do not have OHW, though over a third do
- Most trees are in lawns and natural areas as most are on the property line rather than by the curb

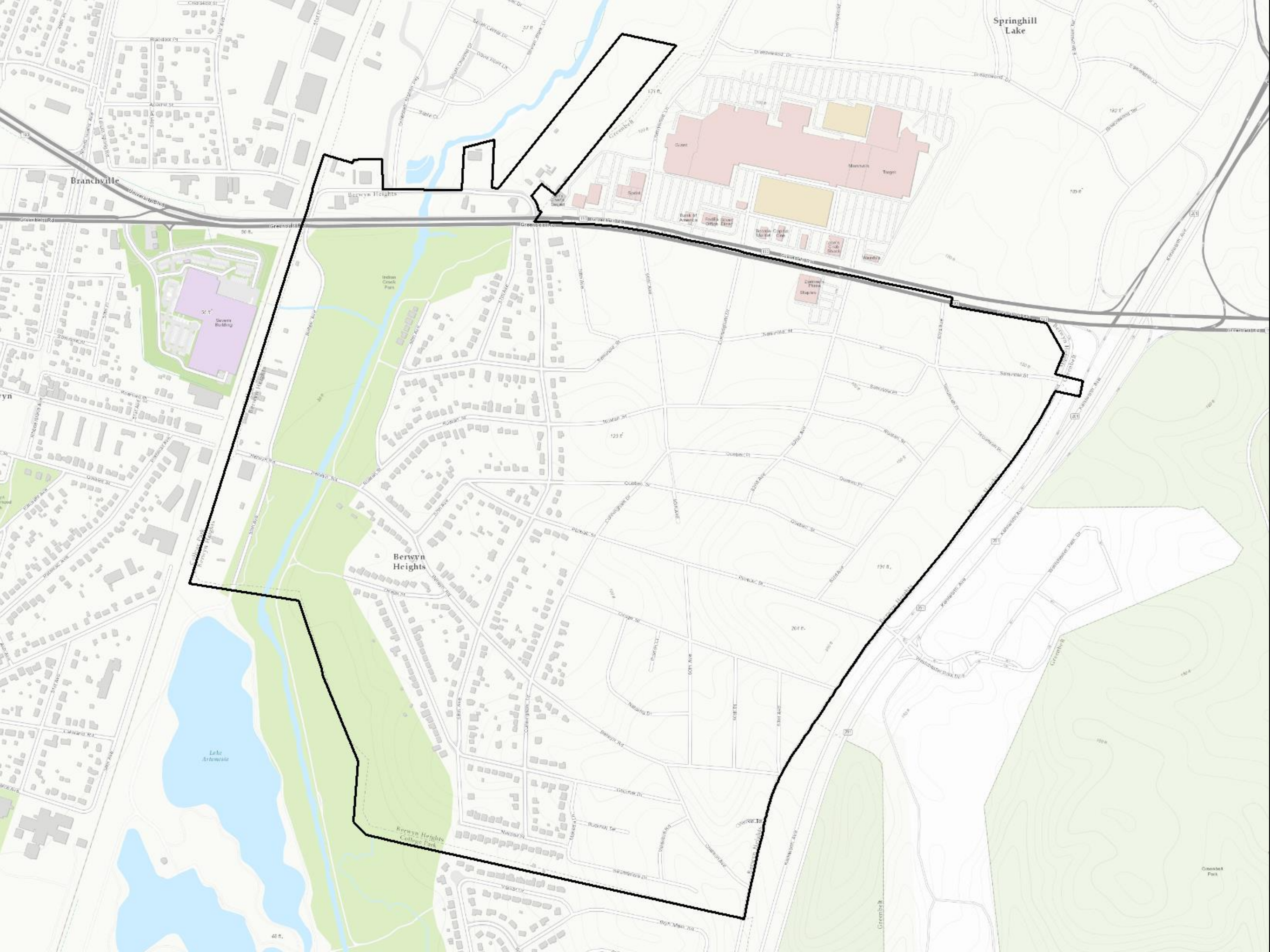
# Berwyn Heights Urban Tree Canopy Assessment

Mike Galvin & Jarlath O'Neil-Dunne



# Study Area





# Land Cover Mapping

Data > Information





Buildings



Roads/Railroads



Other Paved



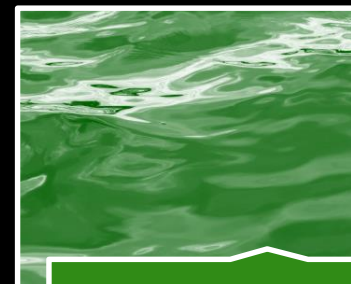
Tree Canopy



Grass/Shrub

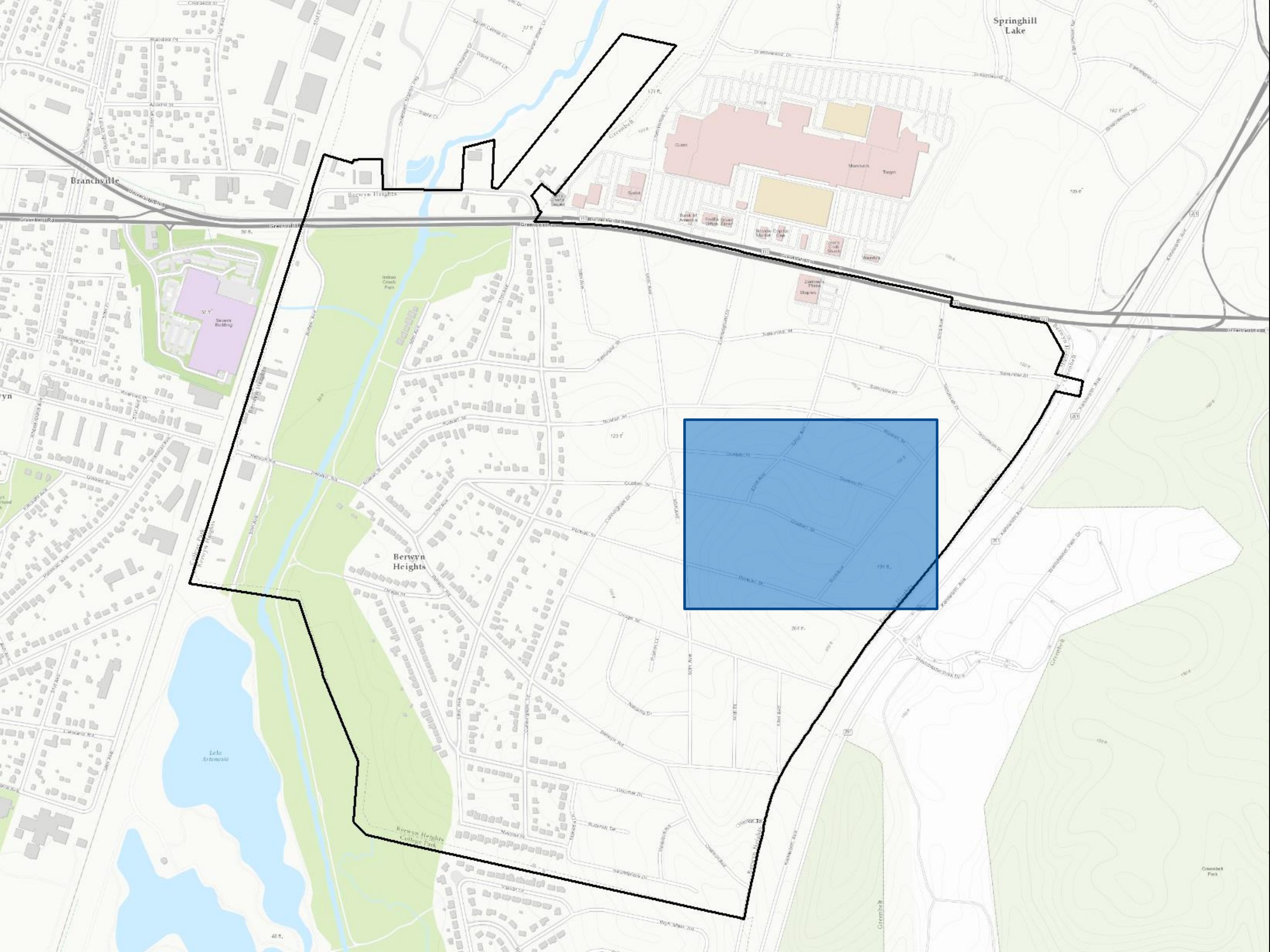


Bare Soil



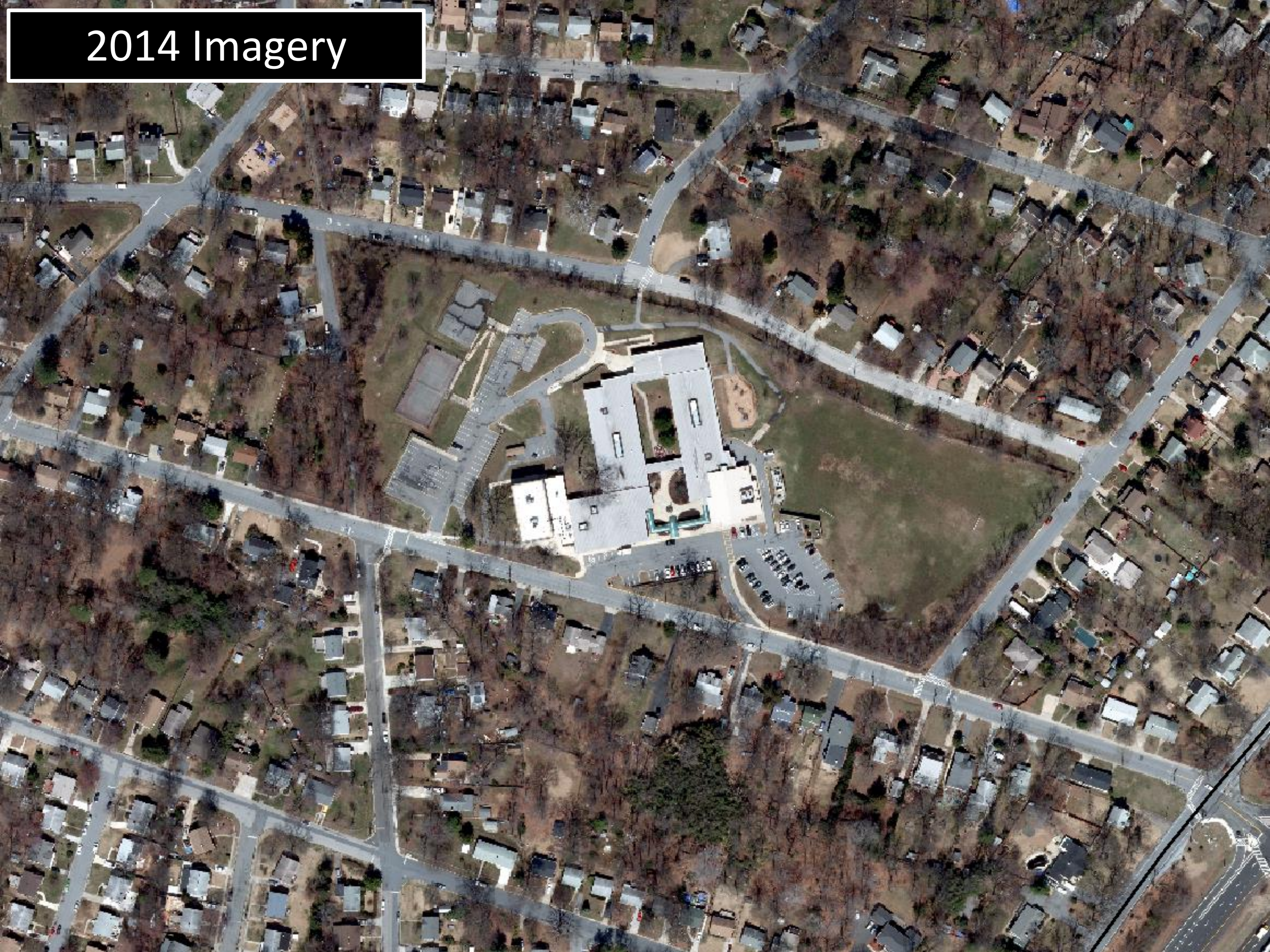
Water





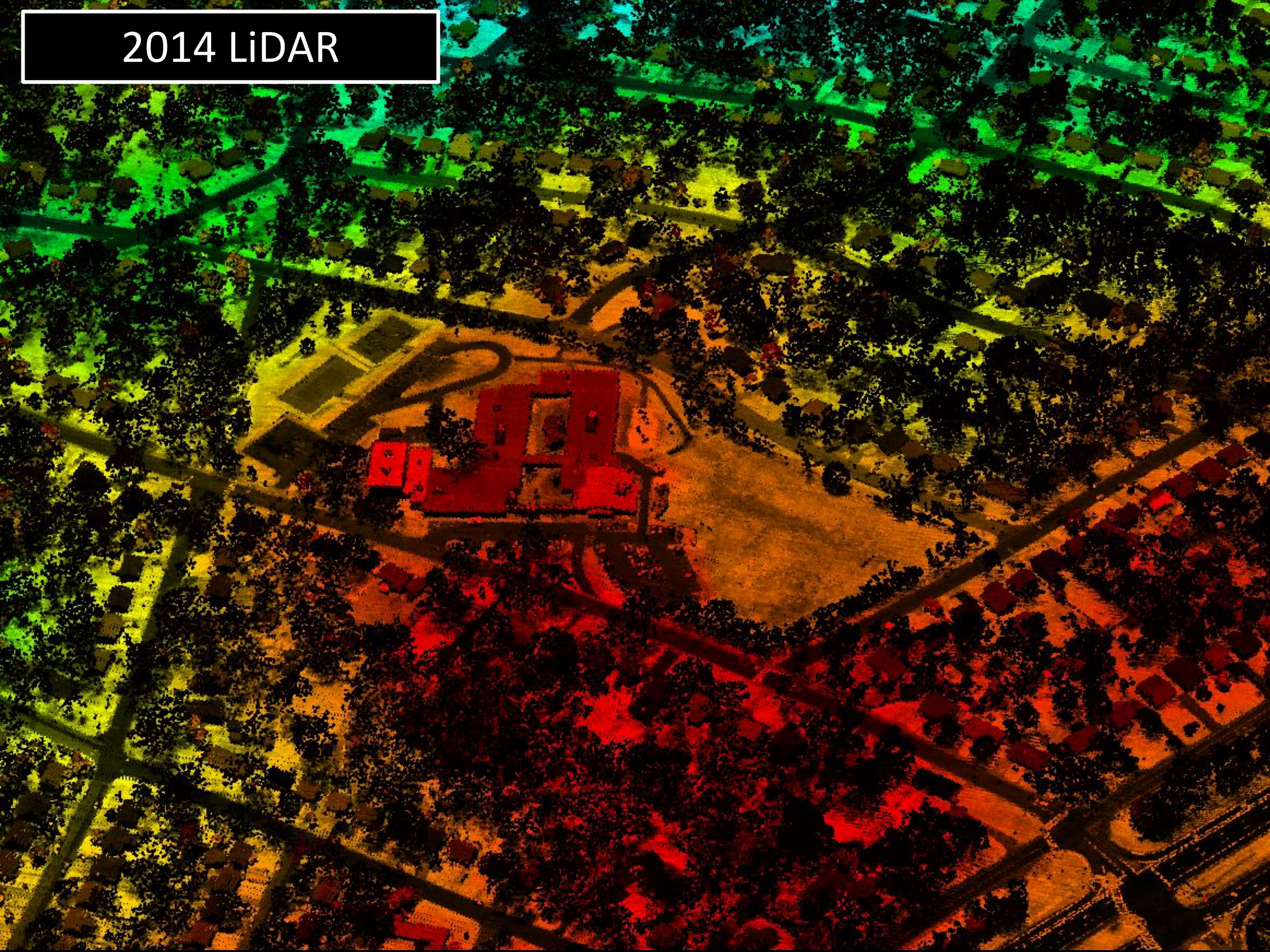


2014 Imagery





2014 LiDAR



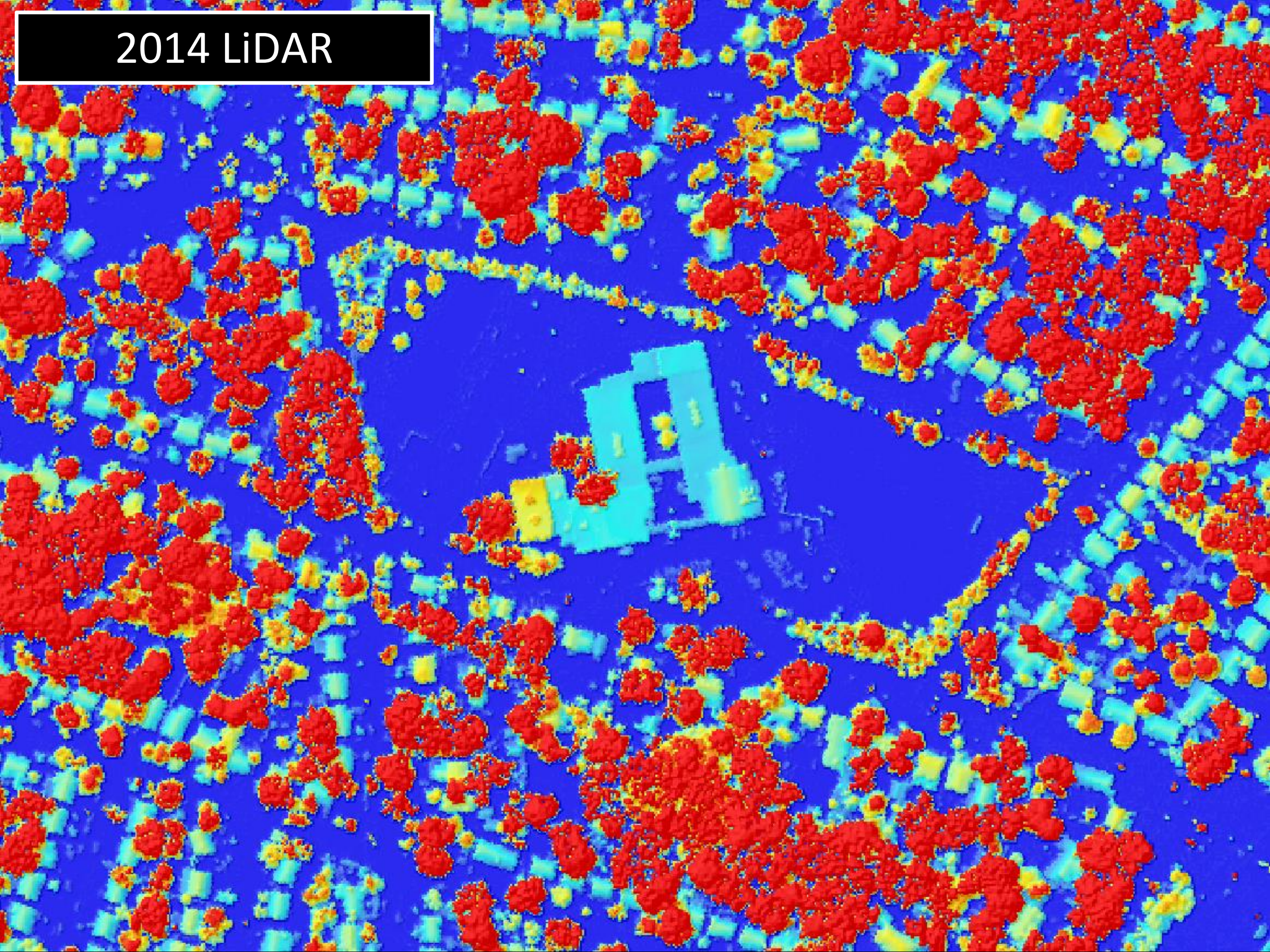


# Building Footprints





2014 LiDAR



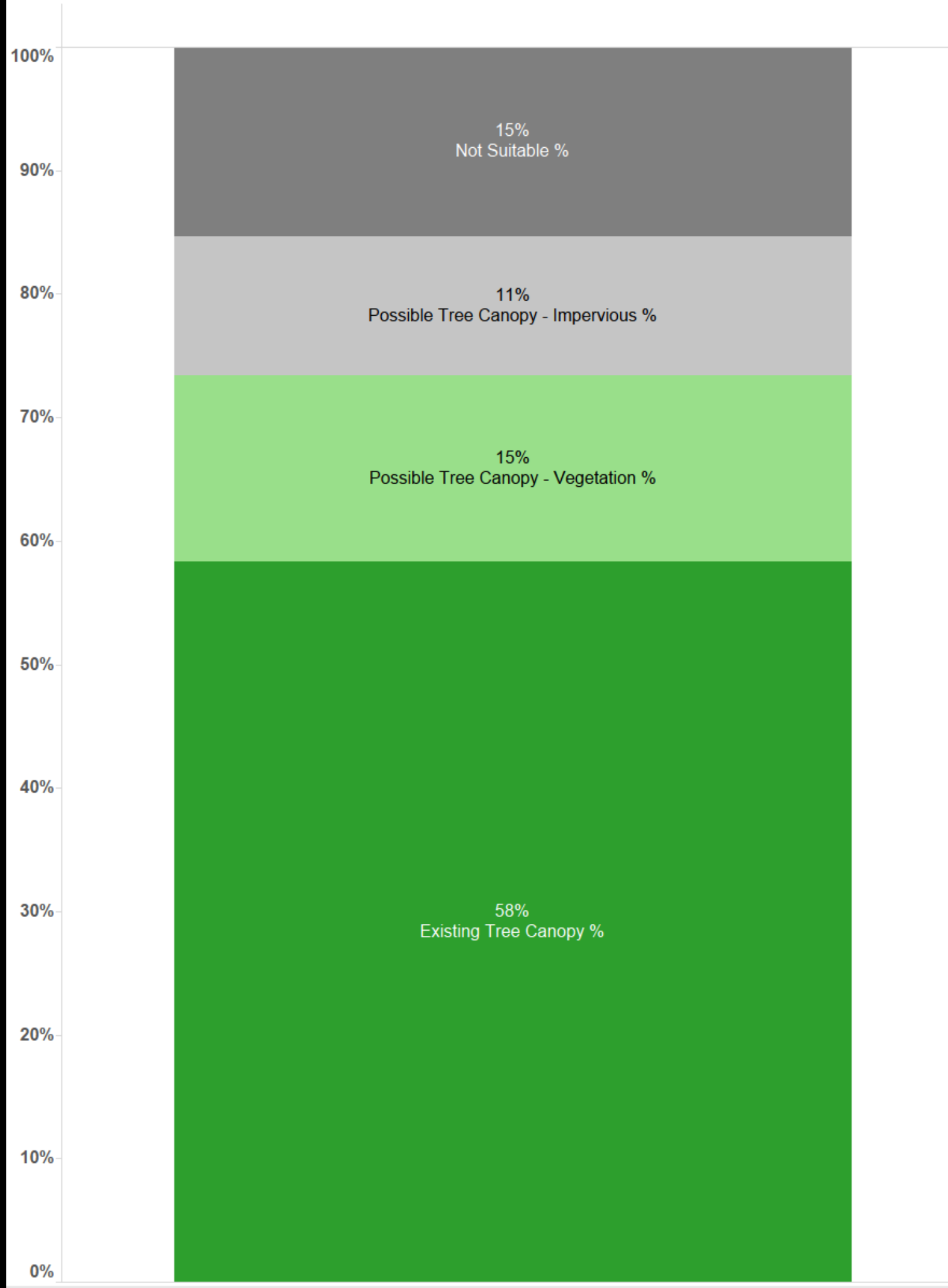


# 2014 Land Cover





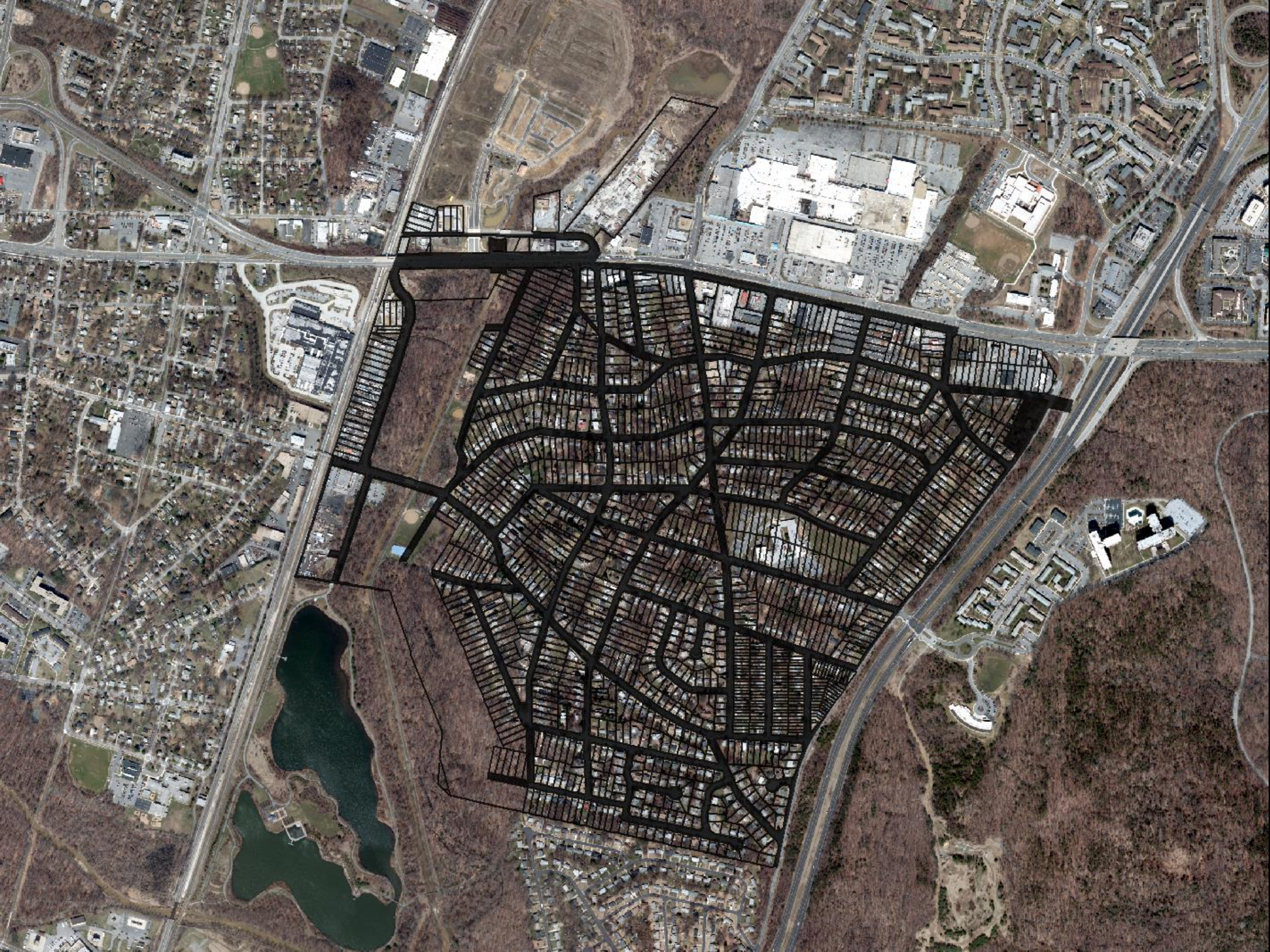
# Tree Canopy Metrics



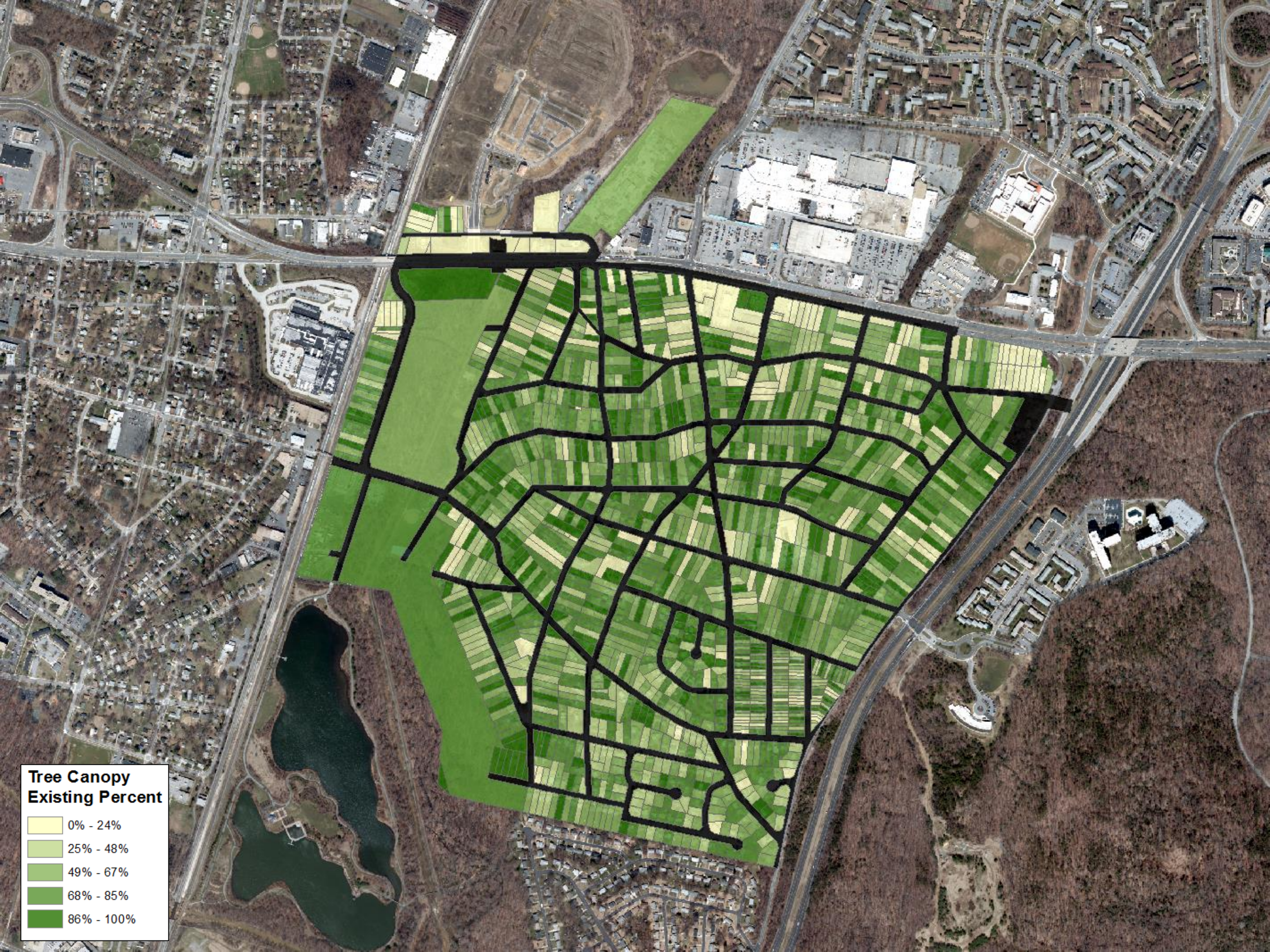
# Parcels

Tree Canopy Metrics





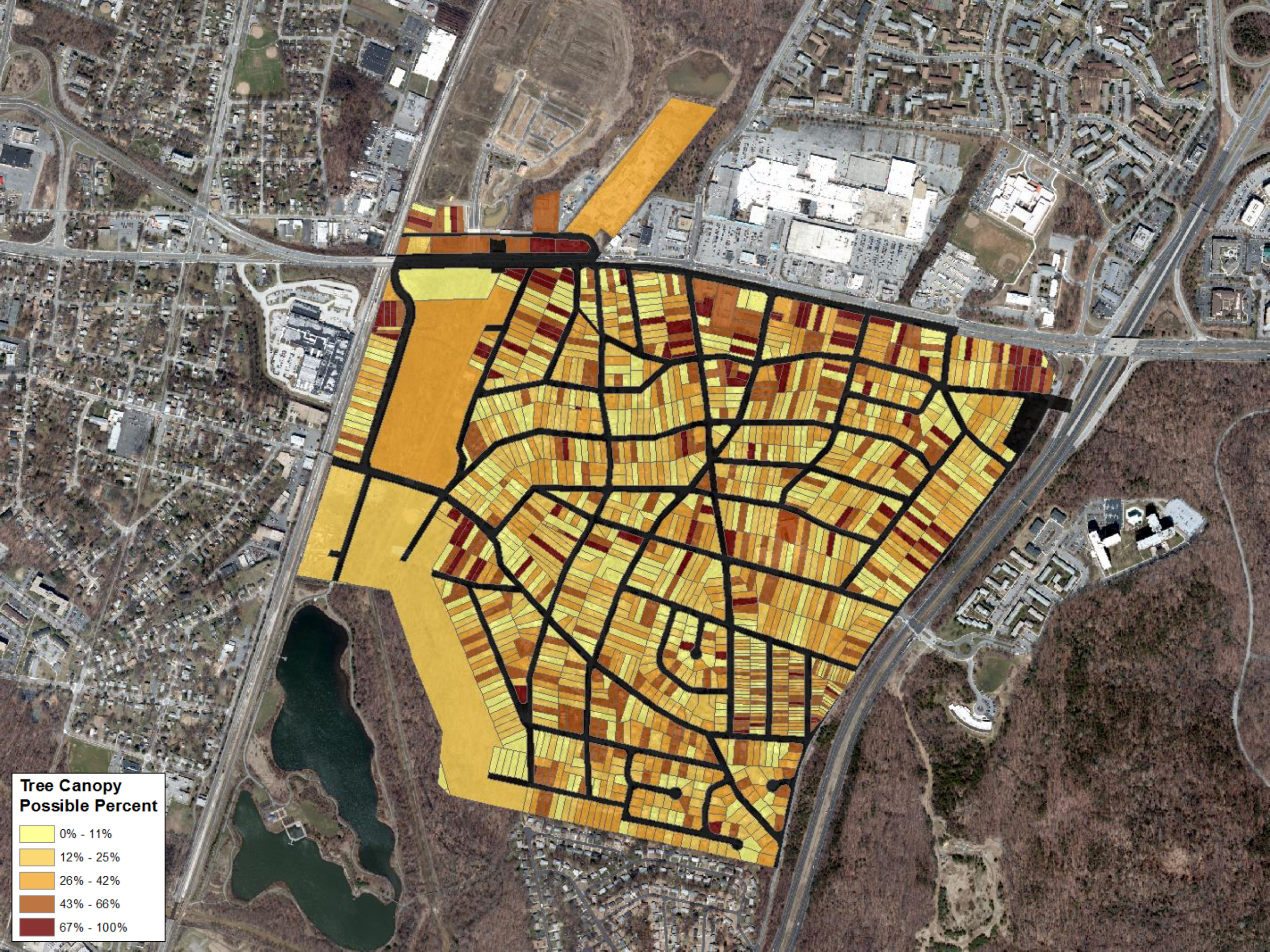




**Tree Canopy  
Existing Percent**

- 0% - 24%
- 25% - 48%
- 49% - 67%
- 68% - 85%
- 86% - 100%





**Tree Canopy  
Possible Percent**

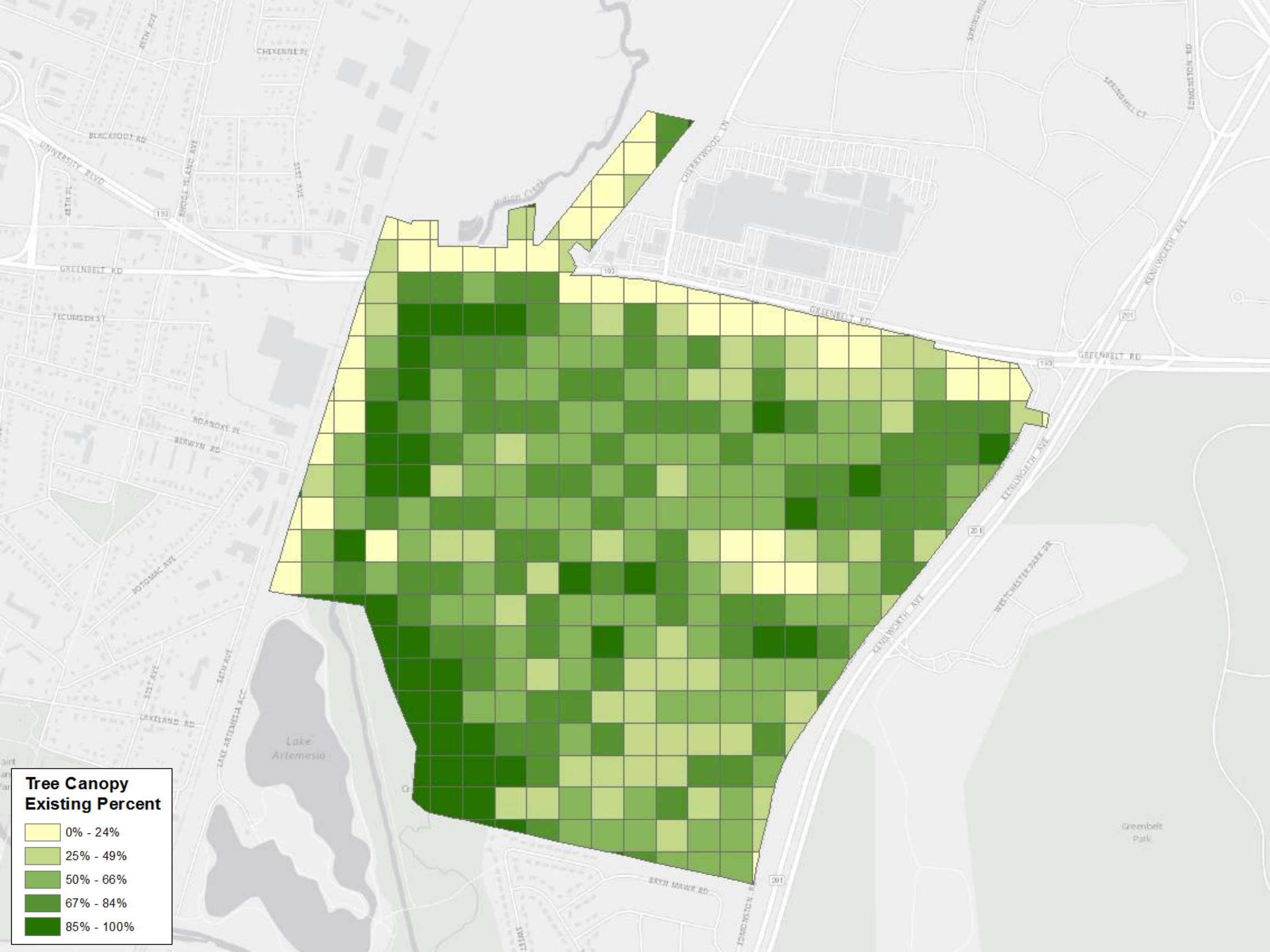
- 0% - 11%
- 12% - 25%
- 26% - 42%
- 43% - 66%
- 67% - 100%



# Surface Temperature

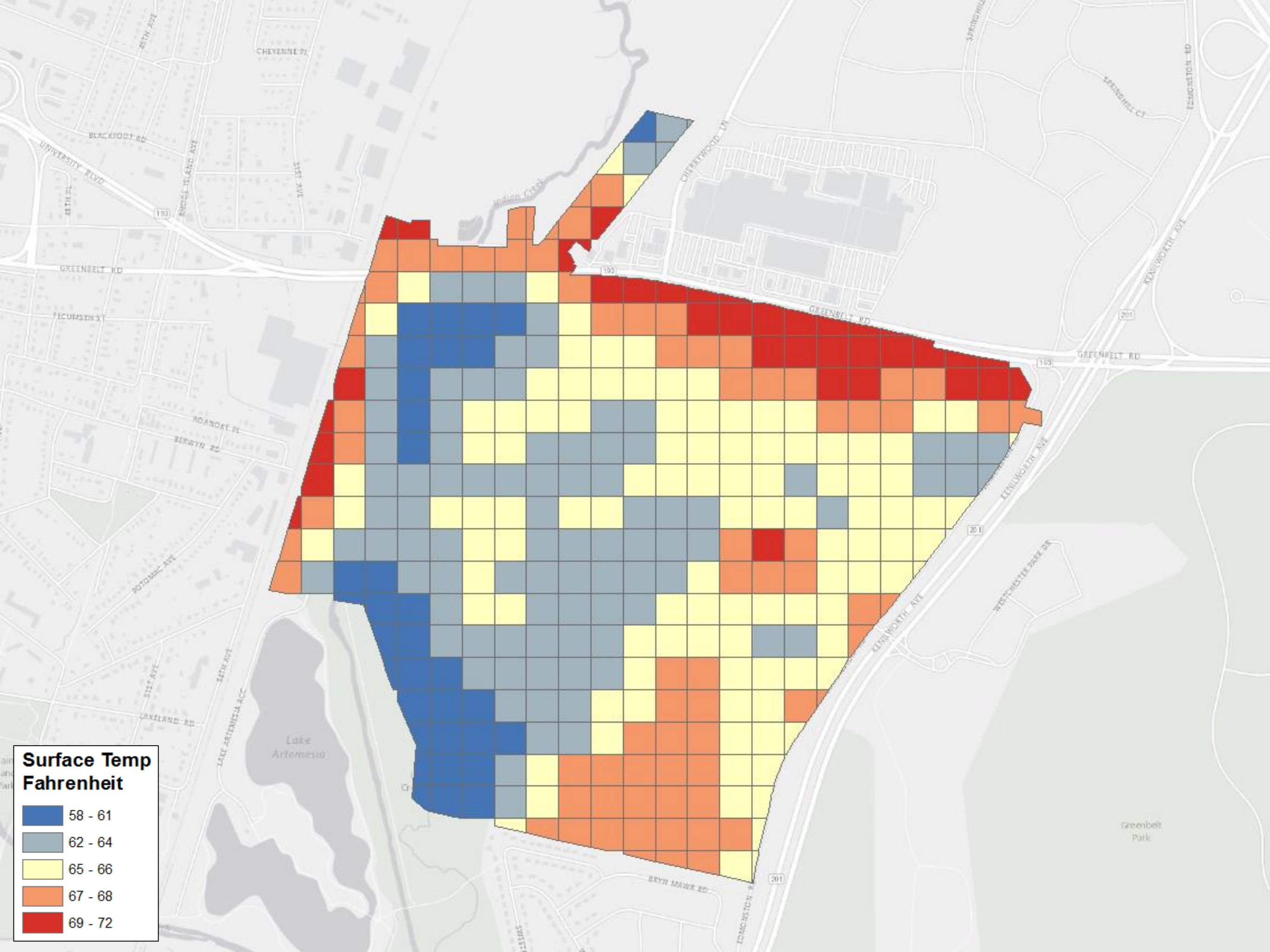
Tree Canopy Metrics



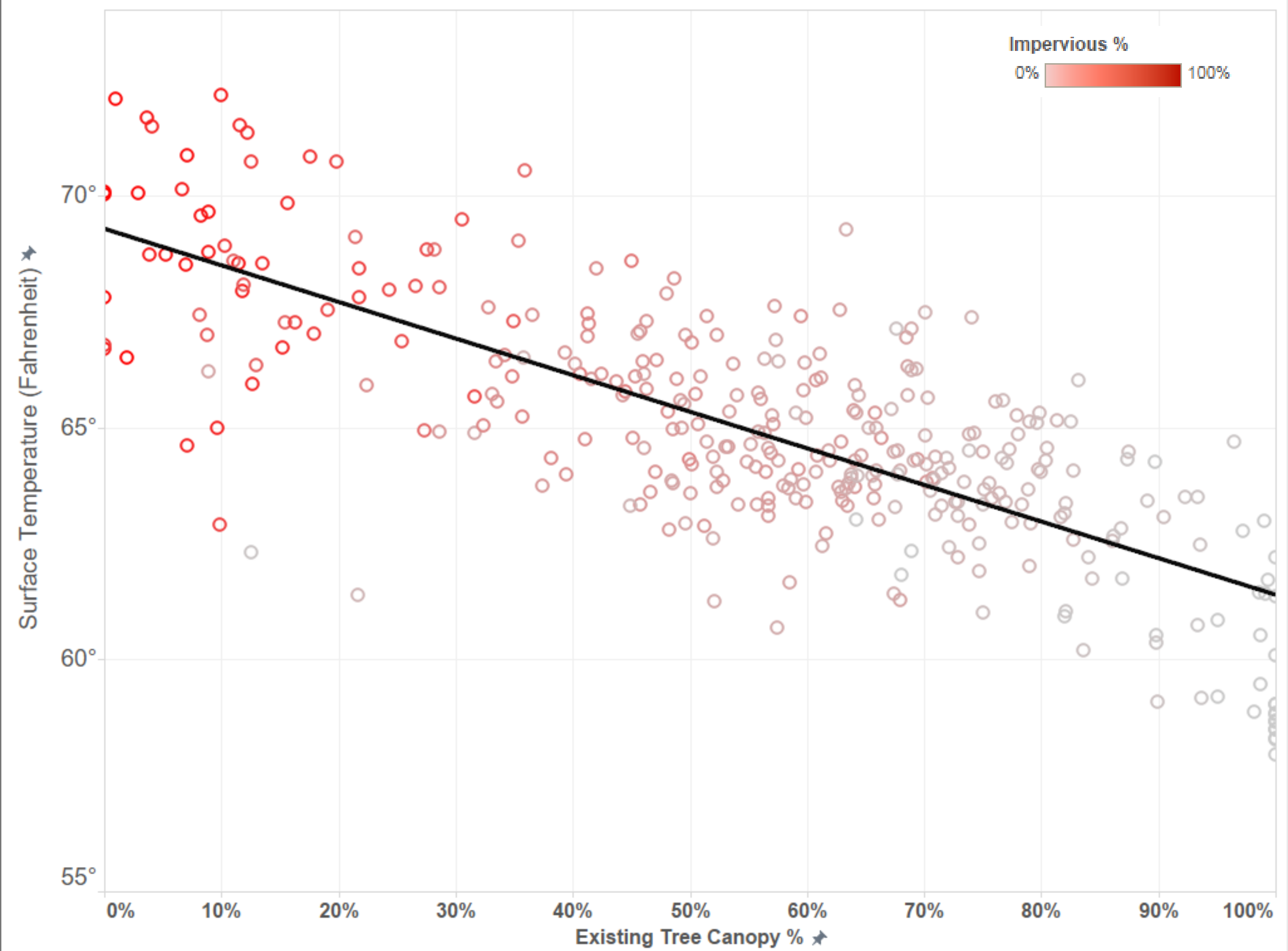


**Tree Canopy  
Existing Percent**

- 0% - 24%
- 25% - 49%
- 50% - 66%
- 67% - 84%
- 85% - 100%







# Summary

- Present tree canopy very high

# Berwyn Heights Tree Benefits Report

<https://landscape.itreetools.org/report/a411086c-b791-4e2b-8e91-fdec636655d/berwyn-heights>

# Priorities

## 1. Short Term

1. Make a decision on disposition of the Shade Tree Board
2. Map public trees
3. Use the map to develop a tree and risk management plan

## 2. Longer term

1. Set a tree canopy goal
2. Monitor canopy and public trees on a periodic basis



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